

Specification Amendments

Page 16, line 20 to page 17, line 12:

Figure 8 shows time exposure photograph of oscilloscope tracings of the anode signals ~~[[64]]~~ 65 arising from each of many positrons losing energy in plastic scintillator 52, which is used to initiate a timing measurement. Each of these signals 65 may be of different amplitude, which makes upper trace, containing many signals, look blurred. These pulses are much faster than those from the conventional inorganic scintillators used to detect the gamma rays. The output signals 72 from the constant fraction discriminator is shown above the input signal 65. The time scale: 10 nanoseconds/division.

Figure 8 shows an oscilloscope tracing showing anode signal 65 from the photo-multiplier ~~[[63]]~~ 64 from plastic scintillator cylinder 52 ~~[[65]]~~, which is used to initiate a timing measurement. This pulse is much faster than that from the conventional inorganic scintillators 12 used to detect the gamma rays. The output signal 72 from the constant fraction discriminator is shown above. The time scale in this image is 10 nanoseconds/division. The measurement depicted in Figure 8 was made with an oscilloscope whose bandwidth was only 150 MHz, so the rise time of the display is actually limited by the oscilloscope's rise time.